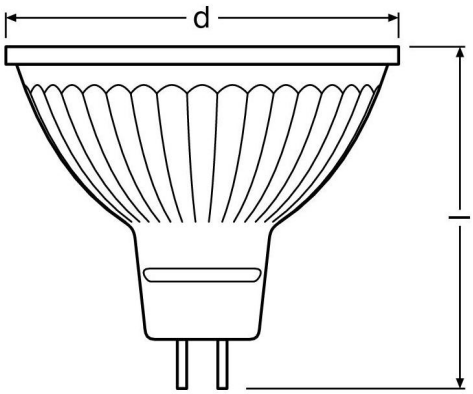
# LED Essence low voltage retrofit
RL-MR16 20 827/36°/GU5.3

Radium

Product Datasheet Date: 01.11.2026






F | 2700K | 15 000h | 4 YEARS GUARANTEE

## General Data

| | |
|---|---|
| Article No. | 44122565 |
| Code | RL-MR16 20 827/36°/GU5.3 |
| Product EAN | 4008597225659 |
| Box quantitiy (pcs.) | 10 |
| EAN Box | 4008597425653 |
| Gross weight of box in kg | 0.455 |
| Length of box in m | 0.255 |
| Width of box in m | 0.107 |
| Height of box in m | 0.072 |
| Product weight | 28 g |
| Product status | Discontinued product |

## Electric Parameters

| | |
|---|---|
| Wattage | 2.1 W |
| Weighted energy consumption in 1000 hours | 3 kWh |
| Lamp power | 2.1 W |
| Power factor | 0.7 |
| Nominal voltage | 12 V |

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## Electric Parameters

| | |
|---|---|
| Voltage type | AC |
| Nominal current | 270 mA |
| Nominal current (mA) | 270 mA |
| Inrush current | 10 A |
| max. no. of lamps at 10A-B10 automatic fuse | 33 |
| max. no. of lamps at 16A-B16 automatic fuse | 42 |
| dimmable | No |

## Light Application Parameters

| | |
|---|---|
| Luminous flux | 210 lm |
| Rated luminous flux according to IEC 62612 | 210 lm |
| Luminous flux | 210 lm |
| Beam angle | 36 ° |
| Luminous intensity | 520 cd |
| Efficacy / Luminous efficiency | 100 lm/W |
| Total mains efficacy | 109 lm/W |
| Color temperature | 2700 K |
| Color coordinate X | 0.458 |
| Color coordinate Y | 0.410 |
| Color rendering index | ≥ 80 |
| Color Stability | ≤ 6 sdcm |

## Service Life

| | |
|---|---|
| Average life | 15000 h |
| Mean service life | 15000 h |
| No. switching cycles | 100000 |
| Guarantee | 4 years |

## Specification

| | |
|---|---|
| Energylabel (G -> A) | F |
| Diameter | 50 mm |
| Length | 45 mm |
| Length | 44 mm |
| Burning position | any |
| Photobiological safety according to EN 62471 | RG0 |
| Lamp shape | Reflector |

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## Specification

| | |
|---|---|
| Base | GU5.3 |
| Material | Glass |
| Colour | White |

## Notes on Operation

| | |
|---|---|
| IP Class (Room/Ceiling) | IP20 |
| Burning position | any |
| Mode of operation | LV transformer |
| Ambient temperatures | -20 … +40 °C |
| With movement sensor | No |

## Information especially for EPREL

| | |
|---|---|
| Lighting technology | LED |
| Directional or non-directional light | NDLS |
| Color tunable light source | No |
| Type of color temperature | SINGLE_VALUE |
| Color rendering index R9 | 1 |
| Color stability MacAdams EPREL | 6 |
| Displacement factor EPREL | 0.70 |
| Life factor EPREL | 0.7 |
| Lumen maintenance EPREL | 0.93 |
| Flicker | 1.0 |
| Stroboscopic effect | 0.4 |
| EPREL ID number | 2012298 |

## Notes

MR16-LED, exchange with 12V halogen lamps, warm white light, glass bulb, non-dim, base GU5,3. LED light does not contain UV or IR radiation.

Please, refer to www.radium.de/recycling for notes on disposal of burned-out lamps as well as lamp breakage.
The "lifespan L70" described for LED lamps indicates the number of hours when the luminous flux has decreased to 70% of its initial value.
The optinal field 'info about service life' contains the frame conditions according to standards based on which the specific service life has been determined. So, for example, "12B50, 50Hz" means that the mean service life (B50) has been determined with a 12h switching cycle at mains (frequency 50Hz), "3B50, HF" is based on a 3h switching cycle at electronic control gear (high frequency).

**Base**



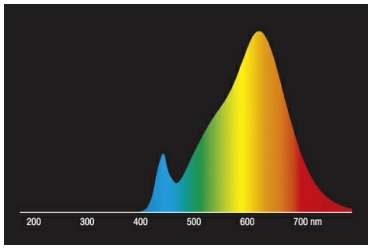
GU5.3
IEC/EN 60061-1
sheet 7004-109-2

**Spectrum**
As daylight is a mixture of direct sunlight and light from the sky, the spectral distribution changes all the time due to the time of the day and the weather. The standard illuminant D65 corresponds to daylight with colour temperature of about 6500K.

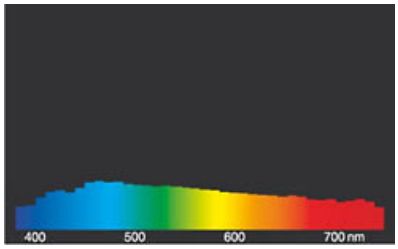
# LED Essence low voltage retrofit

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The colour of coloured LEDs depends on the chemical elements within the light generating chip. The coloured light is generated directly and does not need filtering.
White LEDs are either RGB (red + green + blue chip in one LED = light colour white) or blue LED-chips with yellow/orange phosphor in the resin.
Visible region from 380 to 780 nm; height of graph corresponding with relative spectral emission (400mW/klm)per 10nm.

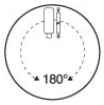



LED Retrofit reflector lamps MR16 / PAR 16 2700K




daylight(D 65)

## Special features












## General notes

For LED replacement of halogen and incandescent lamps, we recommend direct replacement (1: 1) at the respective burning position. For new systems, the number of lamps in the circuit operated at control gear such as transformers or dimmers can be obtained from corresponding compatibility lists (if available). If there is no specification for the type of device or lamp required, for safety reasons, the replacement power shall be assumed as taht of the original halogen type (eg "RL-MR16 35" -> 35W, independent of the real power consumption).

The technical design data in accordance with DIN and IEC. The producer does not take any responsibility for damage to persons or property in case of unsuitable operation or handling of the product. Operating data and dimensions are valid within the usual tolerances. Related lamp types (different bases, mains voltages) may be available on request. Sale and delivery are effected in accordance with the Radium Terms of Delivery and Payment valid on the day of conclusion of contract. Packing units offer economical advantages to the purchase and logistic department. Please match your quantity volume accordingly. For orders of a minimum quantity (clefts) with a lamp model the amount lower than the volume of each packaging unit, we will invoice 10 % additional charge per lamp type. Technical changes and terms of delivery are reserved. Manipulation of any kind to packaging or product is not permissible as this will violate Radium brand rights. Furthermore, technical properties of the product can change to its disadvantage or even destruction. Therefore, Radium cannot be responsible for consequential damages.
® = Registered trademark
Subject to change without notice. Errors and omissions excepted.

## Safety instructions

To ensure full light efficiency and product life, the permissible temperature ranges must be observed and dry environment ensured. When operated with existing control gear, their compatibility with the lamp must be checked.

**All technical data without guarantee.**